	Application No.	Applicant(s)
	09/721,550	REICH, NORBERT
Notice of Allowability	Examiner	Art Unit
	BJ Forman	1634
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313  1. This communication is responsive to Amendments filed 12	(OR REMAINS) CLOSED i or other appropriate comm GHTS. This application is and MPEP 1308.	n this application. If not included unication will be mailed in due course. THIS
<del></del>	<u> </u>	
2. The allowed claim(s) is/are <u>41-74</u> .		
3. $\boxtimes$ The drawings filed on <u>22 November 2000</u> are accepted by	the Examiner.	
<ul> <li>4. Acknowledgment is made of a claim for foreign priority un</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have</li> <li>2. Certified copies of the priority documents have</li> <li>3. Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	been received. been received in Application	on No
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be submi INFORMAL PATENT APPLICATION (PTO-152) which give		
6. CORRECTED DRAWINGS ( as "replacement sheets") must	be submitted.	
(a)  including changes required by the Notice of Draftsperso	on's Patent Drawing Revie	w ( PTO-948) attached
1) hereto or 2) to Paper No./Mail Date		•
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	Amendment / Comment o	r in the Office action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the	84(c)) should be written on t se header according to 37 Cl	he drawings in the front (not the back) of FR 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT F		
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ⊠ Interview S	nformal Patent Application (PTO-152) ummary (PTO-413),
Information Disclosure Statements (PTO-1449 or PTO/SB/08     Paper No./Mail Date		/Mail Date <u>0304</u> . Amendment/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's 9.	Statement of Reasons for Allowance  -  By Forman Primary Examiner Art Unit: 1634

Page 2

Application/Control Number: 09/721,550

Art Unit: 1634

Status of the Claims

1. This action is in response to papers filed 12 March 2004 in which claims 1-40 were

canceled; claims 41-71 were added; and the specification was amended. The amendments

have been thoroughly reviewed and entered.

The previous rejections in the Office Action dated 15 December 2003 are withdrawn in

view of the amendments. The amendments overcome the prior art and place the claims in

condition for allowance.

Claims 41-71 are in condition for allowance.

**EXAMINER'S AMENDMENT** 

2. An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

The application has been amended as follows:

The title has been amended to the following:

METHODS OF USING LABELED PROBE MOLECULES TO QUANTIFY TARGET MOLECULES

Application/Control Number: 09/721,550

Art Unit: 1634

## REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance:

The instant claims are drawn to method of quantifying target nucleic molecules in a sample. The claims require hybridization between unlabeled target nucleic acid molecules and a known number of fluorescing nucleic acid probes comprising fluorescing nucleic acid analoges wherein the hybridization quenches fluorescence from the fluorescing probes. The claims further require repeated steps of contacting of the sample with the known number of probes until the contacting no longer quenches fluorescence wherein the target is quantified by adding or determining the <u>number</u> of probes quenched.

The prior art e.g. Wu et al (U.S. Patent No. 5,846,729) and Conrad (U.S. Patent No. 5,652,099) teach hybridization between unlabeled target nucleic acid molecules. However, in contrast to the instant invention, the prior art does not teach or suggest hybridizing a known number of fluorescing probes; repeated steps of contacting of the sample with the known number of probes until the contacting no longer quenches fluorescence; or quantifying the target by determining the number of probes quenched.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

- 4. Claims 41-71 are allowed.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (571) 272-0741. The examiner can normally be reached on 6:00 TO 3:30.

Application/Control Number: 09/721,550

Art Unit: 1634

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (571) 272-0782. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJ Forman, Ph.D. Primary Examiner Art Unit: 1634

March 23, 2004